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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/748,609 12/26/00 STANLEY

G CRI0033.1

027187  
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SOUTH BEND IN 46601

MM91/0918

EXAMINER

CUNNINGHAM, T

ART UNIT

PAPER NUMBER

2816

DATE MAILED:

09/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/748,609	STANLEY, GERALD R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Terry D. Cunningham	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 December 2000 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4-5</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

The drawings are objected as being informal. Also, the circuits of Fig. 2 need to be labeled separately since each is a separate circuit and to provide consistency with the specification. Formal drawings are required in response to this action. Note, Applicant may no longer request that any objection to the drawing(s) be held in abeyance. See 37 C.F.R. § 1.85(a).

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6-8 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. Elements such as 40-45 and 47, K\*Rb, Rb and the error amplifier are deemed critical or essential to the practice of the invention, but are not included in the claim(s). It is not understood how the circuit can be a "power amplifier" without these elements. An arrangement lacking this feature is not enabled by the disclosure since it cannot be understood from the specification how the circuit will operate without such. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, it is not understood what is meant by a “multiple feedback filter”. Further, there no embodiments seen to have this feature.

In claim 5, it is not understood what is meant by a “state variable filter”.

In claim 6, it is not understood how the circuit can be a “power amplifier” with the elements recited.

In claim 7, for proper antecedent, --isolated-- should be inserted following “the” in line 1.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6 and 8 are rejected under 35 U.S.C. §102(b) as being anticipated by Chew (USPN 5,107,491). Chew discloses, in Fig. 1, a circuit having “a low pass filter (14)”; a “band-reject (i.e., notch) filter (14)”; and a “a pulse width modulation circuit (not shown, but providing a signal to 16), all connected and operating similarly as recited by Applicant.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chew in view of Applicant's prior art Fig. 1. The above circuit to Chew does not expressly disclose a structure for the "band-reject filter" 14 as having a "resistor for tuning". However, Applicant's prior art Fig. 1 (taken from the "Tunable RC Null Networks" cited by Applicant) discloses a notch filter that is easily adjustable and highly sensitive. Therefore, it would have been obvious for one skilled in the art to use the specific notch filter design in Applicant's prior art Fig. 1 for notch filter 14 of Chew to obtain the expected results of easy adjustability and high sensitivity.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chew in view of Sallen et al. (cited by Applicant). In the above reference to Chew, there is no specific disclosure for low pass filter 14. The reference to Sallen et al. discloses a "low-pass filter" having sharp cut-off. Therefore, it would have been obvious to one skilled in the art to use the specific "low-pass filter" taught by Sallen et al. for the specific low pass filter 12 of Chew to obtain the expected results of obtaining sharp cut-off.

#### ***Information Disclosure Statement***

All of the reference cited on the forms PTO-1449 have been considered. However, the International search report has been lined through since such is not a proper reference.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terry Cunningham whose telephone number is (703)308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (703)308-4876. The fax phone number for this Group is (703)308-7722. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TC  
September 10, 2001

  
Terry D. Cunningham  
Primary Examiner  
Art Unit 2816